

regulations. This can only be accomplished by considering local switching and common line as a whole.

B. Relevant Geographic Market.

Issues 14a and 14b (Combined Response)

Should the Commission adopt density-based pricing zones as the relevant geographic market for assessing competition and granting regulatory relief under price caps? Should some other defined geographic area be used?

If we condition the regulatory relief and pricing flexibility discussed in Section IV.B. on a demonstration of competitive conditions, should the relief and flexibility be allowed only in the geographic market in which the demonstration of competitive conditions has been made? How would this affect interstate toll rates? Should the relief and flexibility be permitted in an entire study area even if a demonstration of competitive conditions has been made only in a portion of the study area?

The Second Notice poses a series of questions regarding the geographic area within which to assess competition and to grant regulatory relief under price caps. At the outset, BellSouth reiterates that the "regulatory relief" under price caps to which the Commission refers, *i.e.*, the modifications suggested in Part II of these comments, should not be tied to any showing of competition. Instead, LECs should be relieved from any regulations that are economically inefficient, artificially inflate prices and inhibit innovation because sound regulatory policy dictates such relief. The Commission should not predicate baseline regulatory changes to the price cap plan on the presence of competition, but on the fact that such changes will increase consumer welfare and economic efficiency.^{66/}

The relevance of a geographic dimension relates to the manner in which the Commission should streamline its regulation of LECs, and in this regard, a number of factors

66. See Hausman Statement at ¶ 40.

will define the way in which competition develops for exchange access services.

Historically, LECs have been confined to doing business in areas franchised by state commissions, which were defined in terms of exchanges. For the Bell Operating Companies, service areas were further defined in terms of local access and transport areas (LATAs) by the AT&T divestiture decree.

The Commission should expect competition to develop in all of these areas, but not necessarily throughout all of these areas simultaneously. The most reasonable expectation is that competition will develop in groups or clusters of exchanges ("exchange groups"). BellSouth thus believes that single exchanges or exchange groups are workable geographic areas for measuring competition for purposes of reducing regulation.

In the Second Notice, the Commission has expressed concern that if the geographic areas for measuring competition are too small, substantial administrative burdens could be imposed on the industry and the Commission.^{67/} The use of exchange groups avoids the need to evaluate an excessive number of areas.^{68/}

More important, although the exchange group approach is built around basic LEC serving areas, it is not so rigid as to ignore the variation that will undoubtedly occur -- among different LECs as well as within a particular LEC's operating territory. An exchange group thus provides the Commission with an economically meaningful construct for

67. Second Notice at ¶ 126. In the Second Notice, the Commission expressed its disinclination toward adopting a wire center approach primarily on the basis of the thousands of areas that would have to be reviewed individually to determine competitiveness.

68. For example, in the Miami area, where competition is developing across the area, there are forty wire centers. This same area, however, has only eight exchanges. Thus, from an administrative standpoint, the use of exchanges will facilitate the Commission's review.

the purpose of streamlining regulation. It is an area for which the LEC can demonstrate competition is taking place.

BellSouth believes that exchange groups have the characteristics that the Commission is seeking with respect to the geographic units to be used for streamlining -- they possess contiguous geographic areas, are limited in number and are economically meaningful from a competitive standpoint. In addition, this measure avoids the pitfalls associated with attempting to predefine a precise geography in advance of developing competition.

C. Proposed Factors for Determining When Streamlined Regulation Is Warranted.

Issues 15a, 15b, & 15c (Combined Response)

Should demand-responsiveness be a factor in determining the level of competition for purposes of determining whether services should be streamlined? What should be the relevant factors in determining whether a LEC's customers are demand-responsive? What data and information would be necessary and relevant in determining whether a LEC's customers are demand-responsive? Does the fact that LECs have relatively few customers that account for most of their interstate access demand affect the usefulness of demand-responsiveness as a factor in determining the level of competition?

Should supply-responsiveness be a factor in determining the level of competition for purposes of determining whether services should be streamlined? What should be the relevant factors in determining whether a LEC's competitors have enough readily available supply capacity to constrain the LEC's market behavior and inhibit it from charging excess rates? What data and information would be necessary and relevant in determining whether a LEC's competitors are supply-responsive?

Should market share be a factor in determining the level of competition for purposes of determining whether services should be streamlined? If the Commission considers the relative market share of the LECs and their competitors as one factor in assessing the level of competition for LEC services, what data and information would be necessary to assess the relative market shares of the LECs and their competitors? What should be the relative importance of the market share of the LECs and their competitors in light of other factors incorporated into our analysis and on any other factors that may be proposed?

An adaptive regulatory plan must provide for streamlined regulation for services for which the LEC faces effective competition. As noted by the Commission, streamlined regulation would permit a LEC to file tariffs without cost support on 14 days notice that are presumed lawful. Services that are subject to streamlined regulation would be removed from the constraints of the price limitations associated with the price cap rules. These are the same flexibilities that were afforded to AT&T under streamlined regulation. In addition, streamlined regulation for the LECs should include relief from the rate and rate structure limitations set forth in the Part 69 rules. Failure to take this additional step would diminish substantially, if not nullify, the benefits of streamlined regulation.

The regulatory hammer-lock that the Commission's rules place on LECs comes from two directions; the price cap rules constrain LEC prices even while they remain subject to the rate structure and averaging rules contained in Part 69. The purpose of streamlined regulation is for the Commission to step back from active regulation of those services for which competitive market forces can act as a check on an individual firm's behavior. For AT&T, the only substantive rules that affected its service offerings were the Part 61 rules. For the LECs, it is both the Part 61 rules and Part 69 rules that are pertinent. Relaxation of both sets of rules in the presence of competition is warranted.

With regard to measuring competition and the competitiveness of particular services, the Second Notice restates the criteria that it considered for streamlining AT&T's services -- demand responsiveness, supply responsiveness and market share. When the Commission evaluated AT&T's services, these factors did not carry equal weight. The

Commission recognized that the different characteristics of AT&T's services warranted different points of emphasis.

For example, the overarching criterion for granting streamlined regulation to AT&T's business services was the supply elasticity of those services. The demand elasticity of business services was inferred from the type of users that purchase business services, which tend "tend to be more informed and sophisticated purchasers of telecommunications services than other customers" and increasingly exercise their "buyer power" by soliciting competitive bids before procuring telecommunications services.^{69/}

For interstate exchange access, the customer base is by far the most sophisticated and technically knowledgeable group that exists in the telecommunications marketplace. The majority of interexchange access is obtained by common carriers, some of whom are actual competitors of the LECs and all of whom are potential competitors. Non-carrier customers are generally the large telecommunications users who share the characteristics of business users in the interexchange market.

There can be no question that the customers of exchange access are aware of the choices and alternatives that are available as well as the dynamics of the exchange access marketplace. From the inception of access charges, interexchange carriers have taken advantage of every opportunity to reduce the prices they pay for access facilities. Every change in a Commission rule that altered the relative price relationships between switched and special access has brought with it a corresponding change in for access services. The

69. Competition in the Interstate Interexchange Marketplace, 6 FCC Rcd at 5887.

development of Megacom-type and 800 Readyline-type offerings show the demand responsiveness of the exchange access market.

The key criterion for evaluating competition for exchange access is elasticity of supply. The more elastic the prevailing conditions of supply, the less possible it is to raise prices by limiting output. Where a market segment is characterized by a high elasticity of supply, even small price increases will elicit large expansions of output.

Elasticity of supply is determined by a variety of factors, although two predominate. The first is the supply capacity of existing competitors. If competitors have or can acquire significant additional capacity, then supply elasticities tend to be high. Even if existing competitors do not have substantial excess capacity another factor, conditions of entry, can establish that a market segment is characterized by high supply elasticity. If economic and non-economic barriers to entry are removed, a fair opportunity for self-policing competition is created.

Market share is not a criterion that should be used for determining whether regulation should be streamlined.^{70/} The Commission has recognized the limitations of market share as a measure of competition. Furthermore, the Commission has not attributed importance to market share for the purposes of streamlining regulation where there are high elasticities of demand and supply.^{71/}

70. See Hausman Statement at ¶ 42.

71. Competition in the Interstate Interexchange Marketplace, 6 FCC Rcd at 5889-90.

For exchange access, the Commission should afford streamlined regulation upon a demonstration by the LEC that a particular market segment^{72/} is subject to effective competition as measured by the supply elasticity for that segment.^{73/} For services in the Trunking basket, a showing that alternative network facilities are present and operational should be sufficient to warrant streamlined regulation. Because these alternative networks use fiber-based facilities, their capacity and expansion capability are almost limitless, and the capacity is permanent.^{74/} Thus, alternative networks will provide formidable and lasting competition to LEC transport services.

For the Traffic Sensitive Basket, the demonstration will depend on the service category involved. The database and information/DA service categories would be streamlined based on evidence of the presence of established competitors, although competition for these services may take some unusual turns. For example, alternative directory assistance services can develop from competitors not competing with other elements of exchange access service. Likewise the geographic scope of the competition might well be broader than exchanges. Thus, while the criteria for streamlining should not vary for these

72. Recognizing that competition will not occur simultaneously in all market segments and in all geographic areas, the demonstration will include both service and geographic components. As discussed in response to Issue 14, the geographic component initially should be based on exchange groups. Service groupings should be the service categories (modified) for the Traffic Sensitive basket and the Trunking Basket as whole, while the Common Line basket would be coupled with the local switching service category.

73. Given the sophistication of exchange access customers, there should be no need to quantify the demand elasticity for exchange access.

74. The supply capacity survives irrespective of the success of individual competitors. Thus, once the alternative network is in place, new competitors can easily acquire the supply capacity of a failing entity. See Hausman Statement at ¶ 25.

service categories, some flexibility in the way the Commission makes its evaluation will undoubtedly be necessary.

For switched access services (i.e., local switching service category and carrier common line), the supply elasticity has been affected to a large extent by non-economic barriers to local competition since the ability to provide an economically meaningful substitute for switched access historically has been linked to the provision of local exchange service. These non-economic barriers, however, are rapidly disappearing. Hence, when a LEC can demonstrate that a competitor has been authorized to provide local exchange service and is operational,^{75/} then switched access including transport should be streamlined in those exchanges that competitor is providing local exchange service.

By developing criteria based on supply elasticity as discussed above, the Commission has a basis for concluding that the conditions for competition exist.^{76/} The Commission thus can satisfy itself that a credible competitive control mechanism is in place that justifies the relaxation of price cap regulation.

D. Contract Carriage.

Issues 16a & 16b (Combined Response)

Should the Commission allow the price cap LECs to offer individually negotiated contracts for services subject to streamlined regulation, provided such contracts are made generally available to similarly situated customers under substantially similar circumstances? In particular, would allowing such contract carriage benefit

75. An operational competitor for local exchange service can be facilities based or a combination of facilities based and resale.

76. In order for this approach to be implemented, the Commission should require LEC competitors to report the geographic areas where they provide service and a list of services offered. Such reporting requirements are minimal and entail no special data collection efforts.

consumer welfare, foster competition, and foster efficient use of the network? Would allowing such contract carriage result in unreasonable price discrimination?

If such contracts should be allowed, what tariff filings requirements should we adopt for such contract rates? Specifically, should we require the LECs to file on 14 days' notice a tariff summarizing the contract and containing the following information: (1) the term of the contract, including any renewal options; (2) a brief description of each of the services provide under the contract; (3) minimum volume commitments for each service; (4) the contract price for each service or services at the volume levels committed to by the customers; (5) a general description of any volume discounts built into the contract rate structure; and (6) a general description of other classifications, practices, and regulations affecting the contract rate?

In the Second Notice, the Commission considers expanding to LECs the opportunity to provide services pursuant to individually negotiated contracts for those services subject to streamlined regulation.^{77/} Contract carriage would enable LECs to work with customers to develop specific service applications under contract rates, provided that these rates are made available to other similarly situated customers.

In BellSouth's view, this is a significant pro-competitive step. Providing services pursuant to contracts is an established way of doing business within the telecommunications industry, and indeed, is expected by sophisticated customers that frequently wish to participate in the formulation of the service proposal. A "one-size-fits-all" generic tariff offering is an inadequate way of meeting diverse customer demand. To the extent that the Commission's rules continue to prevent LECs from providing contract carriage services, the rules confer a substantial, but non-economic, advantage to LEC competitors.

77. Second Notice at ¶ 150.

The extension of contract carriage to the LECs will have multiple benefits. It will provide, for example, a means for all customers of access services to have services developed that are tailored to their specific needs and requirements. Without contract carriage, LECs are forced to make choices as to what variables can be incorporated into universal offerings. The end result often is an offering that is adequate for a few and satisfies no one. Contract carriage, on the other hand, is a means of satisfying a broad spectrum of needs, so that every customer -- ranging from individual small businesses to AT&T -- can expect that its service requirements will be met.

Contract carriage is pro-competitive. It will have the benefit of stimulating the price and service rivalry that the Commission expects competition to engender. As customers put out for bid their contracts for telecommunications services, the participation of the LECs will expand these customers' choices in the bidding process, and will increase their "buyer power" in the access market. All of this implies reduced prices for exchange access, and because contract services are available to all similarly situated customers, all customers will benefit.

In addition, contract carriage can increase network efficiency and lower costs of providing all services. Currently, forcing LECs to provide generic offerings across their serving areas can entail network deployments that may not be consistent with market demand, but are required nonetheless by regulation. Such deployment may not be an efficient use of resources and thus may increase the cost and price of such services. To the extent that contract carriage enables LECs to make more rational network deployments

tailored to specific and actual customer demand, all customers of access services will benefit from the increased efficiencies.^{78/}

One concern that has attached to the concept of contract carriage is whether it might lead to unreasonable discrimination. This concern is not well founded. Contract carriage still will require LECs to provide the contract service on the same terms and conditions to all similarly situated customers. This requirement alone satisfies the nondiscrimination provisions of the Communications Act. Moreover, BellSouth has proposed contract carriage only as an adjunct to streamlined regulation. Thus, by definition, the ultimate check on discrimination -- competition -- will be present. The marketplace will prevent the LECs from engaging in discriminatory behavior, because any LEC that attempted to discriminate against a customer or group of customers would merely invite competitors to take away that business.

In authorizing contract carriage for AT&T, the Commission identified the information that should be included in the contract tariff. BellSouth believes that the same information should be provided by all common carriers, including the LECs. Thus, the contract tariff should include: the term of the contract, a brief description of the offering, the minimum commitments of the subscriber, a general description of applicable discounts, and a general description of other material terms. This information satisfies the current statutory requirements without necessitating disclosure of specific customer information.^{79/}

78. See Hausman Statement at ¶ 44.

79. As the Commission has recognized, the filing of tariffs can inhibit robust price competition because it provides pricing information to LEC competitors that typically would not be available in a non-regulated setting. Therefore, it is in the public interest that the information provided with contract tariffs be as minimal as possible to prevent the regulatory process from

E. Procedural Matters.

Issue 17

What procedure should be followed to implement streamlined regulation for a LEC?

In order to obtain streamlined regulation, LECs should file a petition requesting such relief. Indeed, the price cap rules should be amended to include an express provision for a price cap LEC to seek a declaration from the Commission that certain of its services are subject to competition. The rule should include the criteria discussed above. Upon an affirmative finding by the Commission, the services identified in the petition would be subject to streamlined regulation.

From BellSouth's perspective, the primary issue with respect to the procedures implemented in conjunction with streamlining is not so much the formal description of the petition, but concern that whatever procedural mechanism is defined not become a weapon of competitors who want to prevent LECs from being able to compete effectively in the marketplace. The Commission must be alert to this potential and should take steps to prevent its occurrence. Given that the criteria for streamlining will be established, the only purpose of the petition will be to make certain that the criteria have been satisfied. In these circumstances, the Commission's rules should provide a specific time limitation (no more than sixty days) by which the Commission must act on the petition. This step should help prevent the regulatory process from being gamed by LEC competitors.

limiting the development of competitive rivalry.

F. Nondominant Treatment.

Issue 18

Should we adopt rules now that would define the conditions LECs must meet to be considered nondominant? If so, should those conditions be what we used in Competitive Carrier, or some other conditions? Are there any reasons not to regulate a LEC as nondominant for some services and dominant for other services? Are there any reasons not to regulate a LEC as nondominant in some geographic markets and dominant in others? What procedure should a LEC follow to obtain nondominant status? What procedures would apply to a carrier that is determined to be nondominant?

Any adaptive regulatory plan must include provisions for declaring a LEC nondominant in the provision of its services. A LEC should be declared to be nondominant when it is found not possess market power for a particular market segment in a given geographic area. In making this determination, as Dr. Hausman suggests, the Commission should focus on demand and supply considerations, as well as market performance considerations.^{80/}

As Dr. Hausman explains, demand conditions for non-dominance arise when customers find that competitive services are good substitutes for LEC services. Under such conditions, LECs cannot charge a significantly higher price for service unless the quality is significantly better.^{81/} The other chief requirement for a showing of no market power should be a high elasticity of supply. If competitors' supply elasticity is high -- as is the case with CAPs and competitive local exchange carriers -- dominant firms can no longer profitably restrict output because consumers can simply switch to the competition.^{82/}

80. See Hausman Statement at ¶¶ 47-56.

81. See id. at ¶¶ 48-50.

82. Id. at ¶ 51.

Competitive conditions are also important in a market power determination, but as Dr. Hausman points out, market share is not a correct measure of competitive conditions. Instead, it is competition at the margin -- and not market share -- which determines prices.^{83/}

Once a LEC is determined not to have market power, then regulation should be relaxed to the maximum extent permitted by law. Under current statutory provisions, where a LEC is declared to be nondominant, it should be free to file its service tariffs on one days notice without the need for cost support. Such tariffs would be presumed lawful.

For the market segments in which LECs are found nondominant, LECs should be permitted to act in a private carriage capacity without seeking § 214 authorization to withdraw facilities from common carriage. Implicit in a finding of nondominance is the recognition that a market segment is subject to full and effective competition. There is thus no public interest reason for the Commission to prevent LECs from operating on a private carrier basis.

In addition, authorization of private carriage not only is sound public policy, but is a step that is consistent with the pending legislative changes. It is likely that the Communications Act will be substantially revised and that among the revisions that will be enacted will be the authority for the Commission to forebear from regulating common carriers. Without question, nondominance should automatically include regulatory

83. See *id.* at ¶¶ 53-54. For instance, if BellSouth were to attempt to keep its price 5% above the competition, it would only need to lose about 7% of its traffic for this price difference to be unprofitable, given the low marginal costs of most telecommunications services. Thus only relatively small marginal share losses are required before a firm will be forced to lower its prices to competitive levels. *Id.* at ¶ 54 (footnote omitted).

forbearance. Until such time, however, that the Commission is authorized to forebear from regulating common carriers, private carriage represents yet another way the Commission can permit the marketplace to operate unencumbered by regulatory interference.

Finally, granting LECs the opportunity to engage in private carriage is affording them nothing more than the same options that their competitors already enjoy. The Commission has imposed no duty on LEC competitors to choose between private or common carriage. The choice is made on a competitors assessment of how it can best serve its customers. Permitting nondominant LECs to offer services on a private carriage basis would enable them to focus on customer and marketplace needs, the precise behavior that would be expected in a competitive marketplace.

G. Other Issues.

Issues 19 & 20

Bell South's response to these issues will be forthcoming in its comments on the X-Factor and other financial issues.

H. Second Further Notice of Proposed Rulemaking In
CC Docket No. 93 - 197: Changes to AT&T Price Cap Plan.

Issue 21

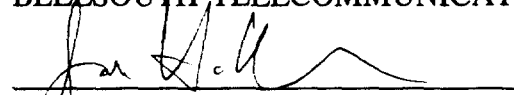
Under what circumstances would the treatment of access charges imposed by LECs and other access providers under AT&T's price cap plan create actual bias in the access services market? Is there any reason not to treat CAP and LEC charges the same under the AT&T price cap plan?

This issue is moot given that the Commission has now declared AT&T to be nondominant.^{84/}

84. See AT&T Non-Dominance Order.

Respectfully submitted,

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Statement of Professor Jerry A. Hausman

1. My name is Jerry A. Hausman. I am MacDonald Professor of Economics at the Massachusetts Institute of Technology in Cambridge, Massachusetts, 02139.

2. I received an A.B. degree from Brown University and a B.Phil. and D. Phil. (Ph.D.) in Economics from Oxford University where I was a Marshall Scholar. My academic and research specialties are econometrics, the use of statistical models and techniques on economic data, and microeconomics, the study of consumer behavior and the behavior of firms. I teach a course in "Competition in Telecommunications" to graduate students in economics and business at MIT each year. Mobile telecommunications is one of the primary topics covered in the course. I also have significant experience in analyzing mergers. I have published academic papers on the proper methods to analyze mergers, and I have given invited seminars to the U.S. Department of Justice and the American Bar Association on the subject. I was a member of the editorial board of the Rand (formerly the Bell) Journal of Economics for the past 13 years. The Rand Journal is the leading economics journal of applied microeconomics and regulation. In December 1985, I received the John Bates Clark Award of the American Economic Association for the most "significant contributions to economics" by an economist under forty years of age. I have received numerous other academic and economic society awards. My curriculum vitae is included as Exhibit 1.

3. I have done significant amounts of research in the telecommunications industry. My first experience in this area was in 1969 when I studied the Alaskan telephone system for the Army Corps of Engineers. Since that time, I have studied the demand for local measured service, the

demand for intrastate toll service, consumer demands for new types of telecommunications technologies, marginal costs of local service, costs and benefits of different types of local services, including the effect of higher access fees on consumer welfare, demand and prices in the cellular telephone industry, and consumer demands for new types of pricing options for long distance service. I have also studied the effect of new entry on competition in paging markets, telecommunications equipment markets, and interexchange markets and have published a number of papers in academic journals and books about telecommunications. I have also edited two recent books on telecommunications, Future Competition in Telecommunications (Harvard Business School Press, 1989) and Globalization, Technology and Competition in Telecommunications (Harvard Business School Press, 1993).

4. I have reviewed the Second Notice of Proposed Rulemaking in this proceeding ("Second Notice"). I believe that the Commission conceptually is on the right track in proposing baseline modifications to the LEC price cap plan, as well as a framework of increasingly less restrictive regulation designed to promote the emergence of competition. I address specific aspects of proposals set forth in the Second Notice--both baseline and overall transition issues--in more detail below.

5. I have previously provided affidavits before the FCC on the proper regulatory framework for Local Exchange Companies (LECs). I have also testified before state regulatory commissions on similar topics. I submitted an affidavit to the FCC in November 1993 regarding competition for Basket 1 services in the long distance industry as part of the AT&T dominance proceeding.

I. Summary and Conclusions

6. Lower prices benefit consumers. LECs should be provided unlimited downward pricing flexibility under baseline price cap regulation. Increased

economic efficiency will also result as prices move closer to costs. Zone density pricing should be extended to CCL, RIC, and switching elements because price decreases for these functions will benefit consumers and increase economic efficiency.

7. New services benefit consumers greatly and lead to the largest gains in economic efficiency in telecommunications. For a single new service, voice messaging, I estimate that consumers gain by about \$5 billion per year, with economic efficiency gains about 10-20% higher. (I use an economic methodology to value these new services, originally developed by the Nobel prize winner Sir John Hicks, which I explain in Section II (¶¶ 27-36.) Thus regulatory delays of new services decrease both consumer gains and economic efficiency significantly. The baseline regulatory framework adopted for LEC price regulation should eliminate delays for new services and anti-competitive actions by competing firms which delay new services.

8. Streamlined regulation should recognize the presence of substantial competition, but it should not be based on a market share test. Services should be removed from price caps in a given geography under streamlined regulation. Contract carriage should also be permitted under streamlined regulation. Lastly, all regulatory restrictions that impede the LECs' ability to change prices should be removed, including cost support requirements.

9. Non-dominant regulation should occur when a LEC has no market power. The finding of a lack of market power should be based on demand conditions, supply (cost) conditions, and competitive conditions. A finding of non-dominance should not be based on a minimum market share held by competitors. Elimination of regulation, to the maximum extent allowed by the law, is the correct regulatory outcome when non-dominance is determined to exist.

I. Downward Pricing Flexibility Benefits Consumers

10. It is a fundamental economic principle that consumers benefit from lower prices. Absent rate of return (cost based) regulation, granting a wide degree of price flexibility to the LECs should not depend on the exact status of regulation, e.g. "baseline", "streamlined", or "non-dominant" regulation as discussed in the Second Notice. Consumers will benefit and economic efficiency will increase if LECs choose to lower prices, regardless of the level of competition in access or local exchange markets. LECs should have the ability to lower prices for their services down to incremental costs without any required cost support.¹ Thus, the current "lower bands" contained in the price cap regulation should be eliminated to permit unlimited downward pricing flexibility. Nor should any subsequent restriction be placed on the LECs' ability to subsequently raise their prices so long as they stay within the upper pricing limits. I now explain the reasoning behind these statements.

A. Customers Benefit from Lower Prices and Economic Efficiency Increases if LECs Choose to Lower Prices

11. Regulation often leads to large distortions in prices. Technology changes so that the cost of providing a regulated telecommunications service decreases markedly. Nevertheless, regulators continue to set a price (rate) which increasingly exceeds cost in order to subsidize other services to meet political or other social objectives. Economic efficiency is decreased when prices are not related to costs in an economic manner. Furthermore, when prices are not related to costs, the deployment of new services--which creates consumer benefits and promotes economic efficiency, as I discuss subsequently--is often retarded. Thus, the ability of a LEC to lower its prices, increase demand, and offer new services at economic price levels leads to large gains in economic efficiency.

¹ Incremental costs are used here in place of the more familiar marginal cost standard because of the "lumpy" investment nature of capital investment in telecommunications.

12. Consumers benefit from lower prices in two ways. The direct cost savings, reduction in price times quantity demanded, is the largest benefit to consumers. An additional benefit arises because consumers will increase their usage of the service as a result of the lower price. The increased demand for the service depends on its price elasticity. This gain in consumers surplus can be significant when prices are reduced substantially.² For current FCC interstate access prices, I have calculated the lost consumers surplus to exceed one billion dollars per year.³ This loss arises because the current interstate access prices far exceed costs, although the efficiency loss was decreased significantly when the contribution from access was shifted in part to the Subscriber Line Charge (SLC or EUCL). If interstate access prices were moved even closer to costs, I estimate that additional long distance calls would increase consumer welfare and economic efficiency by well over \$1 billion per year.

13. Economic efficiency also increases when prices moves closer to costs. The Second Notice places a high degree of importance on increases in economic efficiency. I agree with this emphasis on economic efficiency. Because of the significant amount of fixed and common costs in telecommunications, prices often exceed marginal (incremental) costs by a large amount. Thus, when output increases economic efficiency often increases by a large amount since the gain in economic efficiency is estimated by the formula: $dE = dQ (p - MC)$, where dE is the change in economic efficiency and dQ is the change in demand. If prices decrease and move closer to cost, and demand increases as a result, increases in economic efficiency can be substantial because the p to MC ratio can often exceed relatively high

² See J. Hausman and W. Newey, "Nonparametric Estimation of Exact Consumers Surplus and Deadweight Loss", Econometrica, 1995, which discusses current measurement techniques and provides references to the previous literature.

³ J. Hausman, "Proliferation of Networks in Telecommunications," ed. D. Alexander and W. Sichel, Networks, Infrastructure, and the New Task for Regulation, Univ. Of Michigan Press, 1995.

amounts. Increased output increases economic efficiency and is considered to be "pro-competitive" by economists because the result is closer to the (first best) competitive ideal.

B. Zone Density Pricing Should be Extended

14. As explained above, lower prices benefit consumers and increase economic efficiency when prices move closer to costs. As most economists have recognized and many members of the Commission have previously stated, access prices are well above costs since their contribution is used to help fund local service, which is often priced below cost. Thus, the economic distortions and the harm to economic efficiency are large here due to the large implicit "tax" contained in access prices.⁴

15. To increase economic efficiency by allowing prices to come closer to underlying costs, I believe that the zone density pricing concept should be extended to the CCL, RIC, and switching elements. Since CCL is a subsidy to universal service and universal costs ought to be recovered differently until a Universal Service Fund is established, any downward movement in CCL prices increases economic efficiency to a relatively large extent. Similarly, the RIC is priced well in excess of its incremental cost--I estimate that 50% of the RIC is contribution used to cover the fixed and common costs of the network. Thus, again, a decrease in the RIC price element towards its costs would have a large positive effect on economic efficiency. Lastly, switching should also be permitted downward or upward price flexibility under a zone density pricing structure to allow price to move closer to cost. Overall, the cost of access is about 40% of the current price of access. Zone pricing will permit the establishment of a more rational set of prices. It would benefit consumers, increase network utilization, and increase economic efficiency.

⁴ I have previously estimated the harm to consumers to exceed over \$1 billion per year due to the access "tax". See J. Hausman, "The Proliferation of Networks in Telecommunications", in D. Alexander and W. Sichel, Networks, Infrastructure, and the New Task for Regulation, Univ. Of Michigan Press, 1995.

Thus, the zone density concept should be extended to the other access elements by the Commission.⁵

C. LECs Should Not be Constrained in their Ability to Subsequently Raise Prices to their Previous Level

16. At any point in time, FCC-regulated prices are deemed "just and reasonable." If a LEC decides to lower its price for a competitive service and subsequently decides to raise the price, it should have the ability to return prices as limited by the current maximum price cap rules. The initial level is a just and reasonable price, so that the LEC will not be exercising market power at that level. Thus, I disagree with the proposal in the Second Notice which restricts the ability of the LEC to raise prices more than 1% from their new, lower level. This restriction on pricing flexibility will reduce the incentive of a LEC to reduce prices. No firm can be certain that demand will increase as a result of a lower price. If demand does not increase, any firm, regulated or non-regulated, may well decide to increase its price back to the previous level. Allowing a regulated firm maximum price flexibility gives it an economic incentive to experiment with new pricing options, which may well lead to a substantial increase in demand, and which will greatly increase economic efficiency.

17. Recent regulatory experience demonstrates that limiting price flexibility can harm consumers. The California Public Utilities Commission (CPUC) first allowed cellular companies in California the ability to lower their prices in 1991. However, if the firms lowered their prices they could not subsequently raise them absent a full rate of return hearing. Cellular

⁵ Of course, the best approach by the Commission would be to increase the SLC and to reduce access overall as I demonstrate in my paper, "The Proliferation of Networks in Telecommunications". However, I am aware of the perceived political problems in this approach. Nevertheless, it is important to remember that introduction of the SLC did not lead to a decrease in telephone penetration. Indeed, it led to an increase in penetration since customers consider their entire telephone bill, not just the local component. See, J. Hausman, T. Tardiff, and A. Belinfante, "The Effects of the Breakup of AT&T on Telephone Penetration in the US", American Economic Review, 1993.

prices did not decrease in California during this period despite decreases in other areas of the US where this type of regulation was not imposed. In 1993 the CPUC allowed cellular firms to lower their prices without restricting their ability to increase their prices back to previous levels. Cellular prices decreased by 15% in California in a short period of time.⁶ Thus, the ability to have flexible prices gives firms the incentives to decrease their prices with the knowledge that if demand does not increase, they can return to their previous pricing strategy.

18. A similar situation could well arise in LEC pricing of interstate access. Entry by new competitors and rapid changes in technology may well cause a LEC to consider decreasing its price of interstate access in a given market in response to new or increased competition. However, the price reduction strategy may not be successful, at which point the LEC may decide to end the price reduction strategy. If regulation forbids the LEC to increase its price back to the former regulated level, the economic incentive for the LEC to engage in price reduction strategies will be significantly reduced. The LECs should have the ability to decrease and subsequently to increase their prices so long as they do not exercise market power by charging too high prices.⁷ The economic incentives will then match the incentive faced by an unregulated firm in a competitive situation which is an important goal of regulation.

D. Predatory Pricing is Not a Realistic Concern

19. Predatory pricing is an extremely unrealistic outcome in modern telecommunications. Incremental cost is typically quite low in relation to

⁶ See J. Hausman, "The Cost of Cellular Telephone Regulation", MIT working paper, 1995.

⁷ The only reason to not allow prices to be raised subsequently is because of the possibility of predatory pricing. However, as I discuss in the next section, predatory pricing is not a realistic concern in access provision given the sunk cost features of the technology and the absence of barriers to re-entry.